ZILKA·KOTAB

——— PC ———
ZILKA, KOTAB & FEECE™

RECEIVED
CENTRAL FAX CENTER

OCT 14 2005

95 SOUTH MARKET ST. STE 420
SAN JOSE, CA 95113

TELEPHONE (408) 971-2573
FAX (408) 971-4660

FAX COVER SHEET

Date:	October 14, 2005	Phone Number	Fax Number
To:	Patent Appeal Briefs, USPTO		(571) 273-8300
From:	Kevin J. Zilka		

Docket No: NAIIP360/00.148.01

App. No: **09/823,438**

Total Number of Pages Being Transmitted, Including Cover Sheet: 41

Message:

Please deliver to the Appeal Brief division for Patents.

Thank You,

Kevin J. Zilka

☐ *Original to follow Via Regular Mail* **X** <u>*Original will Not be Sent*</u> ☐ *Original will follow Via Overnight Courier*

**IF YOU DO NOT RECEIVE ALL PAGES OR IF YOU ENCOUNTER
ANY OTHER DIFFICULTY, PLEASE PHONE ___Erica___
AT (408) 971-2573 AT YOUR EARLIEST CONVENIENCE**

October 12, 2005

Practitioner's Docket No. NAI1P360/00.148.01   *PATENT*

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Edwards et al.

Application No.: 09/823,438   Group No.: 2137
Filed: 03/30/2001   Examiner: Michael Pyzocha
For: VIRUS SCANNING PRIORITIZATION USING PRE-PROCESSOR CHECKING

RECEIVED
CENTRAL FAX CENTER
OCT 14 2005

Mail Stop Appeal Briefs -- Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

TRANSMITTAL OF APPEAL BRIEF
(PATENT APPLICATION--37 C.F.R. § 1.192)

1.   This brief is in furtherance of the Notice of Appeal filed October 13, 2005, which reinstates the appeal originally instated by the Notice of Appeal filed on April 28, 2005, and the original Appeal Brief filed June 28, 2005.

2.   STATUS OF APPLICANT

This application is on behalf of other than a small entity.

CERTIFICATION UNDER 37 C.F.R. §§ 1.8(a) and 1.10*
(When using Express Mail, the Express Mail label number is mandatory;
Express Mail certification is optional.)

I hereby certify that, on the date shown below, this correspondence is being:

MAILING
_ deposited with the United States Postal Service in an envelope addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

37 C.F.R. § 1.8(a)   **37 C.F.R. § 1.10***
_ with sufficient postage as first class mail.   _ as "Express Mail Post Office to Addressee"
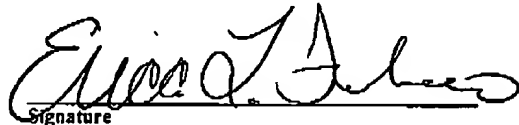   Mailing Label No. _____ (mandatory)

TRANSMISSION
✓ facsimile transmitted to the Patent and Trademark Office, (703) 872-9306.

Date: 10/14/2005

Signature

ERICA L. PARLOW
(type or print name of person certifying)

* *Only the date of filing (' 1.6) will be the date used in a patent term adjustment calculation, although the date on any certificate of mailing or transmission under ' 1.8 continues to be taken into account in determining timeliness. See ' 1.703(f). Consider "Express Mail Post Office to Addressee" (' 1.10) or facsimile transmission (' 1.6(d)) for the reply to be accorded the earliest possible filing date for patent term adjustment calculations.*

Transmittal of Appeal Brief--page 1 of 2

3.   FEE FOR FILING APPEAL BRIEF

       Pursuant to 37 C.F.R. §1.17(c), the fee for filing the Appeal Brief has already been paid.
However, the Commissioner is authorized to charge any fees that may be due to deposit account 50-1351
(Order No. NAI1P360).

4.   EXTENSION OF TERM

       The proceedings herein are for a patent application and the provisions of 37 C.F.R. § 1.136 apply.

       Applicant believes that no extension of term is required. However, this conditional petition is
being made to provide for the possibility that applicant has inadvertently overlooked the need for a
petition and fee for extension of time.

5.   TOTAL FEE DUE

       The total fee due is:

       Appeal brief fee $0.00 (previously paid on June 28, 2005)
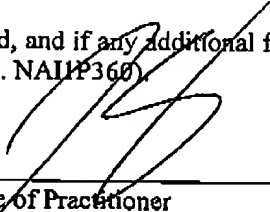   **Total Fee Due** $0.00

6.   FEE PAYMENT

       Applicant believes that only the above fees are due in connection with the filing of this paper
because the appeal brief fee was paid with a previous omission. However, the Commissioner is
authorized to charge any additional fees that may be due (e.g. for any reason including, but not
limited to fee changes, etc.) to deposit account (Order No. NAI1P360).

       A duplicate of this transmittal is attached.

7.   FEE DEFICIENCY

       If any additional extension and/or fee is required, and if any additional fee for claims is required,
charge Deposit Account No. 50-1351 (Order No. NAI1P360).

Reg. No.: 41,429   Signature of Practitioner
Tel. No.: 408-971-2573   Kevin J. Zilka
Customer No.: 28875   Zilka-Kotab, PC
                                         P.O. Box 721120
                                         San Jose, CA 95172-1120
                                         USA

Transmittal of Appeal Brief—page 2 of 2

Practitioner's Docket No. NAI1P360/00.148.01   *PATENT*

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Edwards et al.

Application No.: 09/823,438   Group No.: 2137
Filed: 03/30/2001   Examiner: Michael Pyzocha
For: VIRUS SCANNING PRIORITIZATION USING PRE-PROCESSOR CHECKING

Mail Stop Appeal Briefs – Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

TRANSMITTAL OF APPEAL BRIEF
(PATENT APPLICATION--37 C.F.R. § 1.192)

1.   This brief is in furtherance of the Notice of Appeal filed October 13, 2005, which reinstates the appeal originally instated by the Notice of Appeal filed on April 28, 2005, and the original Appeal Brief filed June 28, 2005.

2.   STATUS OF APPLICANT

This application is on behalf of other than a small entity.

CERTIFICATION UNDER 37 C.F.R. §§ 1.8(a) and 1.10*
(When using Express Mail, the Express Mail label number is mandatory;
Express Mail certification is optional.)

I hereby certify that, on the date shown below, this correspondence is being:

MAILING

_ deposited with the United States Postal Service in an envelope addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

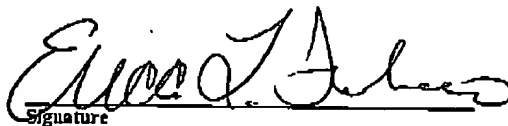| 37 C.F.R. § 1.8(a)	37 C.F.R. § 1.10*
_ with sufficient postage as first class mail.	_ as "Express Mail Post Office to Addressee" Mailing Label No._____ (mandatory)

TRANSMISSION

✓ facsimile transmitted to the Patent and Trademark Office, (703) 872-9306.

Date: _10/14/2005_

Signature

ERICA L. FARLOW
(type or print name of person certifying)

* Only the date of filing (' 1.6) will be the date used in a patent term adjustment calculation, although the date on any certificate of mailing or transmission under ' 1.8 continues to be taken into account in determining timeliness. See ' 1.703(). Consider "Express Mail Post Office to Addressee" (' 1.10) or facsimile transmission (' 1.6(d)) for the reply to be accorded the earliest possible filing date for patent term adjustment calculations.

Transmittal of Appeal Brief—page 1 of 2

3.   FEE FOR FILING APPEAL BRIEF

Pursuant to 37 C.F.R. §1.17(c), the fee for filing the Appeal Brief has already been paid. However, the Commissioner is authorized to charge any fees that may be due to deposit account 50-1351 (Order No. NAI1P360).

4.   EXTENSION OF TERM

The proceedings herein are for a patent application and the provisions of 37 C.F.R. § 1.136 apply.

Applicant believes that no extension of term is required. However, this conditional petition is being made to provide for the possibility that applicant has inadvertently overlooked the need for a petition and fee for extension of time.

5.   TOTAL FEE DUE

The total fee due is:

Appeal brief fee $0.00 (previously paid on June 28, 2005)
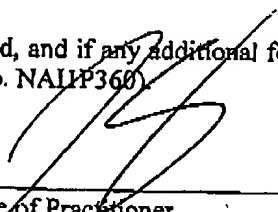**Total Fee Due** $0.00

6.   FEE PAYMENT

Applicant believes that only the above fees are due in connection with the filing of this paper because the appeal brief fee was paid with a previous omission. However, the Commissioner is authorized to charge any additional fees that may be due (e.g. for any reason including, but not limited to fee changes, etc.) to deposit account (Order No. NAI1P360).

A duplicate of this transmittal is attached.

7.   FEE DEFICIENCY

If any additional extension and/or fee is required, and if any additional fee for claims is required, charge Deposit Account No. 50-1351 (Order No. NAI1P360).

Reg. No.: 41,429
Tel. No.: 408-971-2573
Customer No.: 28875

Signature of Practitioner
Kevin V. Zilka
Zilka-Kotab, PC
P.O. Box 721120
San Jose, CA 95172-1120
USA

Transmittal of Appeal Brief—page 2 of 2

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:)
)
Edwards et al.   )   Group Art Unit: 2137
)
Application No. 09/823,438   )   Examiner: Pyzocha, Michael
)
Filed: March 30, 2001   )   Date: October 14, 2005
)
For: VIRUS SCANNING PRIORITIZATION)
USING PRE-PROCESSOR CHECKING   )
_____)

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

ATTENTION: Board of Patent Appeals and Interferences

APPEAL BRIEF (37 C.F.R. § 41.37)

This brief is in furtherance of the Notice of Appeal filed October 13, 2005, which
reinstates the appeal originally instated by the Notice of Appeal filed on April 28,
2005, and the original Appeal Brief filed June 28, 2005.

The fees required under § 1.17, and any required petition for extension of time for filing
this brief and fees therefor, are dealt with in the accompanying TRANSMITTAL OF
APPEAL BRIEF.

This brief contains these items under the following headings, and in the order set forth
below (37 C.F.R. § 41.37(c)(i)):

I   REAL PARTY IN INTEREST
II   RELATED APPEALS AND INTERFERENCES
III   STATUS OF CLAIMS
IV   STATUS OF AMENDMENTS

-1-

V   SUMMARY OF CLAIMED SUBJECT MATTER

VI   ISSUES

VII   ARGUMENTS

VIII   APPENDIX OF CLAIMS INVOLVED IN THE APPEAL

IX   APPENDIX LISTING ANY EVIDENCE RELIED ON BY THE APPELLANT
IN THE APPEAL

The final page of this brief bears the practitioner's signature.

I REAL PARTY IN INTEREST (37 C.F.R. § 41.37(c)(1)(i))

The real party in interest in this appeal is McAfee, Inc.

-3-

II RELATED APPEALS AND INTERFERENCES (37 C.F.R. § 41.37(c) (1)(ii))

With respect to other prior or pending appeals, interferences, or related judicial proceedings that will directly affect, or be directly affected by, or have a bearing on the Board's decision in the pending appeal, there are no other such appeals, interferences, or related judicial proceedings.

Since no such proceedings exist, no Related Proceedings Appendix is appended hereto.

-4-

III STATUS OF CLAIMS (37 C.F.R. § 41.37(c) (1)(iii))

A.   TOTAL NUMBER OF CLAIMS IN APPLICATION

Claims in the application are: 1-5, 7-11, 17-23, 25-29, 35-41, 43-47 and 53-59

B.   STATUS OF ALL THE CLAIMS IN APPLICATION

1.   Claims withdrawn from consideration: None
2.   Claims pending: 1-5, 7-11, 17-23, 25-29, 35-41, 43-47 and 53-59
3.   Claims allowed: None
4.   Claims rejected: 1-5, 7-11, 17-23, 25-29, 35-41, 43-47 and 53-59

C.   CLAIMS ON APPEAL

The claims on appeal are: 1-5, 7-11, 17-23, 25-29, 35-41, 43-47 and 53-59

See additional status information in the Appendix of Claims.

IV STATUS OF AMENDMENTS (37 C.F.R. § 41.37(c)(1)(iv))

As to the status of any amendment filed subsequent to final rejection, there are no such amendments after final.

V SUMMARY OF CLAIMED SUBJECT MATTER (37 C.F.R. § 41.37(c)(1)(v))

With respect to a summary of Claim 1 et al., as shown in Figures 3 and 4, a method for prioritizing virus scan requests is provided including checking a virus scan request to determine if scanning an object of the request is necessary (e.g. item 320 of Figure 3) and placing the virus scan request on a queue in a priority order based on a characteristic of the virus scan request (e.g. item 350 of Figure 3). The characteristic includes at least one of an identity of the user triggering the virus scan request, a type of the process accessing the object, a time stamp of when the virus request was received, and an indication of a network node accessing the object, wherein the virus scan request is prioritized based on at least one of the user identity being an administrator as compared to a regular user, the process type being an operating system as compared to a user appellant, the time stamp being earlier than the time stamps of each scan request previously placed on the queue, and the indication being that the object is accessed from a server console as compared to a network client (e.g. item 430 of Figure 3). Note page 13, line 9 – page 14, line 18 and page 11, line 8 – page 12, line 6, for example.

With respect to a summary of Claim 37 et al., the above summary is incorporated, at least in part, by reference. In addition, Figure 5 shows a virus scanner including a pre-processor thread that checks a virus scan request to determine if scanning an object of the request is necessary (e.g. item 320 of Figure 3) and a queue that receives the virus scan request in a priority order based on characteristics of the virus scan request, the characteristics including at least two of an identity of the user triggering the virus scan request, a type of the process accessing the object, a time stamp of when the virus scan request was received, and an indication of a network node accessing the object, wherein the virus scan request is prioritized based on at least two of the user identity being an administrator as compared to a regular user, the process type of being an operating system as compared to a user application, the time stamp being earlier than the time stamps of each scan request previously placed on the queue, and the indication being that the object is accessed from a server console as compared to a network client (e.g. items 530-550 of Figure 5). Note page 14, line 19 – page 15, line 13, for example.

-7-

With respect to a summary of Claim 55 et al., the above summaries are incorporated, at least in part, by reference. In addition, Figure 6 shows a computer system is provided including a processor coupled to a system bus (e.g. item 605 of Figure 6), a memory coupled to the processor through the system bus (e.g. items 602-604 of Figure 6), a machine-accessible medium coupled to the processor through the system bus (e.g. items 621-627 of Figure 6), and a virus scanning process executed from the machine-accessible medium by the processor, wherein the virus scanning process causes the processor to check a virus scanning request to determine if scanning an object of the request is necessary, and if so to further place the checked virus scan request on a queue in a priority order based on characteristics of the virus scan request, the characteristics including each of an identity of the user triggering the virus scan request, a type of the process accessing the object, a time stamp of when the virus scan request was received, and an indication of a network node accessing the object, wherein the virus scan request is prioritized based on the user identity being an administrator as compared to a regular user, the process type being an operating system as compared to a user application, the time stamp being earlier than the time stamps of each scan request previously placed on the queue, and the indication being that the object is accessed from a server console as compared to a network client (e.g. item 430 of Figure 3). Note page 15, line 14 – page 17, line 18, for example.

VI ISSUES (37 C.F.R. § 41.37(c)(1)(vi))

Following, under each issue listed, is a concise statement setting forth the corresponding ground of rejection.

Issue # 1: The Examiner has rejected Claims 1-11, 17, 19-23, 25-29 and 35 under 35 U.S.C. 103(a) as being unpatentable over Chess et al., U.S. Patent No. 6,560,632 in view of Wong, U.S. Patent No. 5,974,465.

Issue # 2: The Examiner has rejected Claims 18 and 36 under 35 U.S.C. 103(a) as being unpatentable over Chess et al., U.S. Patent No. 6,560,632 in view of Wong, U.S. Patent No. 5,974,465, in further view of McAfee (webpage).

Issue # 3: The Examiner has rejected Claims 37-41 and 43-53 under 35 U.S.C. 103(a) as being unpatentable over Chess et al., U.S. Patent No. 6,560,632 in view of Wong, U.S. Patent No. 5,974,465, in further view of "Reserved-Checkout for Versioned Object" IBM 1993.

Issue # 4: The Examiner has rejected Claim 54 under 35 U.S.C. 103(a) as being unpatentable over Chess et al., U.S. Patent No. 6,560,632 in view of Wong, U.S. Patent No. 5,974,465, in further view of "Reserved-Checkout for Versioned Object" IBM 1993, in further view of McAfee (webpage).

Issue # 5: The Examiner has rejected Claims 55-59 under 35 U.S.C. 103(a) as being unpatentable over Chess et al., U.S. Patent No. 6,560,632 in view of Wong, U.S. Patent No. 5,974,465, in further view of "Reserved-Checkout for Versioned Object" IBM 1993, in further view of "Chapter Thirteen Performance Tuning" (webpage), in further view of Using Netware 3.12 (webpage).

VII ARGUMENTS (37 C.F.R. § 41.37(c)(1)(vii))

The claims of the groups noted below do not stand or fall together. In the present section, appellant explains why the claims of each group are believed to be separately patentable.

<u>Issue # 1:</u>

The Examiner has rejected Claims 1-11, 17, 19-23, 25-29 and 35 under 35 U.S.C. 103(a) as being unpatentable over Chess et al., U.S. Patent No. 6,560,632 in view of Wong, U.S. Patent No. 5,974,465.

Group # 1: Claims 1, 2, 5, 17, 19, 20, 23 and 35

The Examiner has relied on the following excerpt from Chess to meet appellant's claimed: "checking a virus scan request to determine if scanning an object of the request is necessary; and placing the virus scan request on a queue in a priority order based on a characteristic of the virus scan request" (see Claim 1 and similar, but not identical, language in remaining independent claims).

> "The units of digital data preferably include queries or files. In one such embodiment, the distributed system includes a computer protection system and the units of digital data include files or checksums of files which are suspected to contain malicious code. The malicious code may include computer viruses, worms or Trojan Horses.
>
> It is preferable that the prioritizing step comprises the steps of: classifying the queued queries or files into categories, clustering the files, in each of the categories, into similarity clusters; choosing, for each similarity cluster, one or more representatives; and determining an order of processing for the one or more representatives. The classifying step preferably includes the step of classifying the queued queries or files according to the type of digital object they contain." (col. 3, lines 42-56)

Appellant respectfully disagrees with this assertion. Specifically, Chess merely suggests <u>classifying</u> queries or files *already* queued, for *prioritized processing.* In sharp contrast, appellant teaches and claims <u>placing</u> the virus scan requests on a queue in a priority order based on a characteristic of the virus scan request, for

-10-

prioritized queuing. Thus, Chess's prioritization (as well as Wong's, for that matter) is specific to a *classification* process that occurs *after queuing,* while appellant's prioritization is specific to the *queuing process* <u>itself</u> *during queuing.*

In the Advisory Action dated 4/19/2005, the Examiner has stated that Chess' rearranging of the queue is still placing requests in a prioritized order onto a queue and it is not claimed that this should be done during queuing. Appellant respectfully disagrees with such an assertion. Specifically, appellant claims "<u>placing</u> the virus scan request on a queue in a priority order..." (emphasis added), and therefore clearly claims that the prioritizing is done during queuing.

In the Office Action dated 8/5/2005, the Examiner has stated that "for Chess to prioritize the queries or files already queued they must be taken off of the queue and placed back on the queue in the correct priority order." However, appellant notes that Chess does <u>not</u> teach prioritizing the queries or files already queued, as argued by the Examiner, but instead only teaches "determining an order of processing for the one or more representative." Thus, only the representative queries or files are prioritized. However, nowhere in Chess in there any disclosure that "the virus scan request [is placed] on a queue in a priority order <u>based on a characteristic of the</u> <u>virus scan request,</u>" as claimed by appellant (emphasis added).

In fact, Chess only teaches choosing representatives based on a characteristic of the <u>file,</u> such as a size of the file, a file that compresses the best, etc. (see Col. 7, lines 41-59). Appellant respectfully asserts that choosing representative to be prioritized based on a characteristic of the file does not meet appellant's specific claim language, namely "placing the virus scan request on a queue in a priority order <u>based</u> <u>on a characteristic of the virus scan request</u>" (emphasis added).

Furthermore, the Examiner has failed to meet appellant's claimed "checking a virus scan request to determine if scanning an object of the request is necessary." Again, appellant respectfully asserts that Chess merely teaches selecting representatives for processing based on characteristics of the queries/files. However, Chess does *not* teach "checking a <u>virus scan request</u>" let alone doing so "to determine if scanning an

-11-

object of the request is necessary," as specifically claimed by appellant (emphasis added).

Still yet, the Examiner has relied on the following excerpt from Wong to meet appellant's claimed: "the characteristic including at least one of an identity of the user triggering the virus scan request ... wherein the virus scan request is prioritized based on at least one of the user identity being an administrator as compared to a regular user" (see Claim 1 and similar, but not identical, language in remaining independent claims).

```
"Whenever an outbound packet is to be transmitted,
prioritization software module 208 examines that packet to
determine whether it should be stored in queue 209. The
prioritization software module 208 makes its determination
based upon a particular configuration scheme. It is the
function of software module 208 to initially configure the
prioritization scheme. The configuration process entails
specifying a number of different priority levels. For each of
these priority levels, the software module 208 specifies a
number of buffers within queue 209 which are to be reserved
for that particular priority level. A buffer is a discrete
unit of memory which is used to store one packet. The size of
the packets and buffers can vary, depending on the hardware
and software considerations." (col. 4, lines 14-41)
```

Appellant respectfully disagrees with this assertion. Specifically, there is absolutely no mention in the foregoing excerpt, nor the remaining Wong reference, of any sort of placing virus scan requests in a queue based on a virus scan request characteristic including "an identity of the user triggering the virus scan request ... wherein the virus scan request is prioritized based on at least one of the user identity being an administrator as compared to a regular user" (emphasis added), as claimed.

In the Advisory Action dated 4/19/2005, the Examiner has stated that Col. 4, lines 27-41 of Wong teaches different users where the user is sending the request. Appellant respectfully asserts, however, that Wong teaches assigning priority based on input from either a user or network administrator. This clearly does not meet the specificity of appellant's claims, since such input does meet triggering a virus scan request, as claimed.

-12-

In the Office Action dated 8/5/2005, the Examiner has merely reiterated his argument that "Wong teaches prioritization based on the identity of a user as seen in column 4, lines 14-41." Appellant again asserts that Wong merely teaches assigning priority based on types of applications or input from either a user or network administrator (see specifically Col. 4, lines 37-39), and does not teach "placing virus scan requests in a queue based on a virus scan request characteristic" including "an identity of the user triggering the virus scan request ... wherein the virus scan request is prioritized based on at least one of the user identity being an administrator as compared to a regular user" (emphasis added), as claimed.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on appellant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed.Cir.1991). Appellant respectfully asserts that at least the first and third elements of the *prima facie* case of obviousness have not been met.

Appellant thus respectfully asserts that at least the third element of the *prima facie* case of obviousness has not been met, since the prior art references, when combined, fail to teach or suggest all of the claim limitations, as noted above.

Still yet, with respect to the first element of the *prima facie* case of obviousness, the Examiner states that it would have been obvious to one of ordinary skill in the art at the time of the invention was made to use Wong's method of prioritization to prioritize the requests of Chess et al. Appellant respectfully disagrees with this proposition, especially in view of the vast evidence to the contrary.

-13-

For example, Chess relates to a <u>distributed security system</u>, while Wong relates to a <u>network data packet prioritization system</u>. To simply glean features from a <u>network data packet prioritization system</u>, such as that of Wong, and combine the same with the *non-analogous art* of <u>distributed security systems</u>, such as that of Chess would simply be improper. A network data packet prioritization system prioritizes data packets via a network device, while a distributed security system detects viruses, etc. "In order to rely on a reference as a basis for rejection of an appellant's invention, the reference must either be in the field of appellant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned." In re Oetiker, 977 F.2d 1443, 1446, 24 USPQ2d 1443, 1445 (Fed. Cir. 1992). See also In re Deminski, 796 F.2d 436, 230 USPQ 313 (Fed. Cir. 1986); In re Clay, 966 F.2d 656, 659, 23 USPQ2d 1058, 1060-61 (Fed. Cir. 1992) In view of the vastly different types of problems a <u>distributed security system</u> addresses as opposed to a <u>network data packet prioritization system</u>, the Examiner's proposed combination is inappropriate. To simply dismiss appellant's unique application of prioritization techniques in the specific context of a security system would improperly frustrate the inventive concepts of appellant.

In the Office Action dated 8/5/2005, the Examiner has argued that "[s]ince Chess and Wong both relate to systems over a network they are analogous art." Appellant respectfully disagrees. Appellant again emphasizes that security systems, as in Chess, and packet prioritization systems, as in Wong, are *not* analogous, regardless of whether they are both systems that run over a network. The packet prioritization system of Wong simply transmits incoming and outgoing packets over a computer network according to a priority, whereas the security system of Chess detects unwanted data at nodes through which digital data flow.

It appears that the Examiner has simply generalized his descriptions of the arts of Chess and Wong until they were analogous, to conveniently support his arguments. Of course, if generalized sufficiently, all arts can be found to be analogous in some capacity.

Group # 2: Claims 3 and 21

-14-

The Examiner has relied on Col. 3, line 47-Col. 4, line 5 of Chess to make a prior art showing of appellant's claimed technique "wherein selecting is based on the priority order." Appellant respectfully asserts that the only "selecting" taught by the above excerpt simply relates to selecting "N smallest files in each cluster as the one or more representatives..." Further, the only priority taught by Chess relates to prioritizing the representatives (see Col. 3, lines 52-53). Therefore, the actual selecting of files to be representatives cannot be prioritized since the prioritizing only happens once the representatives are selected (see Col. 4, line 1).

In the Office Action dated 8/5/2005, the Examiner has argued that "[s]ince [the packets] are placed on [the queue in] an order based on priority and characteristics, Chess discloses [appellant's] claimed limitations." Appellant again emphasizes that the only priority taught by Chess relates to prioritizing the representatives (see Col. 3, lines 52-53) such that, when the files are selected from the queue to be representatives, they are not yet prioritized.

Appellant respectfully asserts that at least the third element of the *prima facie* case of obviousness has not been met, for the reasons set forth hereinabove.

   Group # 3: Claims 4, 9, 22 and 27

The Examiner has relied on Col. 3, line 47-Col. 4, line 5 of Chess to make a prior art showing of appellant's claimed "wherein selecting is based on the characteristic of the virus scan request." Such excerpt however, merely teaches that "selecting N smallest files in each cluster as the one or more representatives..." There is simply no disclosure of any basis from which such files are selected, and therefore no disclosure of such basis being the "characteristic of the virus scan request" in the manner claimed by appellant.

In the Office Action dated 8/5/2005, the Examiner has again argued that "[s]ince [the packets] are placed on [the queue in] an order based on priority and characteristics, Chess discloses [appellant's] claimed limitations." Appellant asserts

-15-

that the prioritization of representative files in Chess is based on characteristics of the file (see Col. 7, lines 41-59), and *not* "based on the characteristic of the virus scan request," as claimed by appellant (emphasis added).

Appellant respectfully asserts that at least the third element of the *prima facie* case of obviousness has not been met, for the reasons set forth hereinabove.

> *Group # 4: Claims 7, 8, 25 and 26*

The Examiner has relied on Col. 3, lines 48-64 of Chess to make a prior art showing of appellant's claimed technique "wherein the priority order is further based on comparing the characteristics of the virus scan request with the characteristics of the virus scan requests previously placed on the queue." Appellant respectfully asserts that such excerpt relied on by the Examiner simply discloses that files are clustered according to a code-similarity measure evaluated on a probably-malicious part of each file. Therefore, files that are presently in the queue are prioritized according to their code, and thus there is no teaching of "comparing the characteristics of the virus scan request with the characteristics of the virus scan requests previously placed on the queue," as claimed by appellant.

In the Office Action dated 8/5/2005, the Examiner has simply reiterated his argument that "Chess teaches clustering and updating which correspond to the already on the queue and previously on the queue." Appellant respectfully asserts that nowhere in Chess is there any disclosure of "comparing the characteristics of the virus scan request with the characteristics of the virus scan requests previously placed on the queue," as claimed by appellant (emphasis added). Simply clustering files that were already placed on the queue and updating prioritizing information, as taught by Chess, does not even suggest utilizing any sort of characteristics of a virus scan request, and especially not in the specific context claimed by appellant.

Appellant respectfully asserts that at least the third element of the *prima facie* case of obviousness has not been met, for the reasons set forth hereinabove.

-16-

Group # 5: Claims 10, 11, 28 and 29

The Examiner has relied on Col. 4, lines 9-13 of Chess to make a prior art showing of appellant's claimed "wherein selecting is further based on comparing the characteristics of the virus scan requests placed in the queue with the characteristics of the previously selected virus scan requests whose objects are currently being scanned." Such excerpt, however, only discloses updating prioritization information based on identifying other queued files as being in the same cluster as a file that has been determined to be malicious. There is simply no disclosure of "objects currently being scanned," in the context claimed by appellant.

In the Office Action dated 8/5/2005, the Examiner has again simply reiterated his argument that "Chess teaches clustering and updating which correspond to the already on the queue and previously on the queue." Appellant again respectfully asserts that simply clustering files that were already placed on the queue and updating prioritizing information, as taught by Chess, does not even suggest utilizing any sort of characteristics of a virus scan request, and especially not "comparing the characteristics of the virus scan requests placed in the queue with the characteristics of the previously selected virus scan requests whose objects are currently being scanned," as claimed by appellant (emphasis added).

Appellant respectfully asserts that at least the third element of the *prima facie* case of obviousness has not been met, for the reasons set forth hereinabove.

<u>Issue # 2:</u>

The Examiner has rejected Claims 18 and 36 under 35 U.S.C. 103(a) as being unpatentable over Chess et al., U.S. Patent No. 6,560,632 in view of Wong, U.S. Patent No. 5,974,465, in further view of McAfee (webpage).

Group # 1: Claims 18 and 36

-17-

Such claims are deemed allowable for the reasons base Claim 1 is deemed allowable.

Issue # 3:

The Examiner has rejected Claims 37-41 and 43-53 under 35 U.S.C. 103(a) as being unpatentable over Chess et al., U.S. Patent No. 6,560,632 in view of Wong, U.S. Patent No. 5,974,465, in further view of "Reserved-Checkout for Versioned Object" IBM 1993.

Group # 1: Claims 37, 38, 41 and 53

Such claims are deemed allowable for the reasons based Claim 1 is deemed allowable.

In addition, the Examiner has relied on page 3 of IBM to meet appellant's claimed "characteristics including ... a time stamp of when the virus request was received ... wherein the virus scan request is prioritized based on ... the time stamp being earlier than the time stamps of each scan request previously placed on the queue."

Appellant respectfully asserts that IBM relates to checking out objects where reservations can be made to check out objects when such objects are already checked out. IBM simply does not teach placing a "checked virus scan request on a queue in a priority order based on... a time stamp of when the virus request was received," in the specific manner claimed by appellant (emphasis added). The only priority with respect to timestamps disclosed by IBM relates to reservations where a user with a reservation for an object with a highest priority (earliest timestamp) will have first priority in receiving the object over users with reservations with lower priority (later timestamps). Clearly, prioritizing reservations for objects, as in IBM, does not meet any sort of technique "wherein the virus scan request is prioritized based on ... the time stamp being earlier than the time stamps of each scan request previously placed on the queue," as specifically claimed by appellant (emphasis added).

-18-

Appellant respectfully asserts that at least the third element of the *prima facie* case of obviousness has not been met, for the reasons set forth hereinabove.

Group # 2: Claim 39

The Examiner has relied on Col. 3, line 47-Col. 4, line 5 of Chess to make a prior art showing of appellant's claimed technique "wherein the selection is based on the priority order." Appellant respectfully asserts that the only "selecting" taught by the above excerpt simply relates to selecting "N smallest files in each cluster as the one or more representatives..." Further, the only priority taught by Chess relates to prioritizing the representatives (see Col. 3, lines 52-53). Therefore, the actual selecting of files to be representatives cannot be prioritized since the prioritizing only happens once the representatives are selected (see Col. 4, line 1).

In the Office Action dated 8/5/2005, the Examiner has argued that "[s]ince [the packets] are placed on [the queue in] an order based on priority and characteristics, Chess discloses [appellant's] claimed limitations." Appellant again emphasizes that the only priority taught by Chess relates to prioritizing the representatives (see Col. 3, lines 52-53) such that, when the files are selected from the queue to be representatives, they are <u>not</u> yet prioritized.

Appellant respectfully asserts that at least the third element of the *prima facie* case of obviousness has not been met, for the reasons set forth hereinabove.

Group # 3: Claims 40 and 45

The Examiner has relied on Col. 3, line 47-Col. 4, line 5 of Chess to make a prior art showing of appellant's claimed technique "wherein the selection is based on the characteristic of the virus scan request." Such excerpt however, merely teaches that "selecting N smallest files in each cluster as the one or more representatives..." There is simply no disclosure of any basis from which such files are selected, and

-19-

therefore no disclosure of such basis being the "characteristic of the virus scan request," in the manner claimed by appellant.

In the Office Action dated 8/5/2005, the Examiner has again argued that "[s]ince [the packets] are placed on [the queue in] an order based on priority and characteristics, Chess discloses [appellant's] claimed limitations." Appellant asserts that the prioritization of representative files in Chess is based on characteristics of the file (see Col. 7, lines 41-59), and *not* "based on the characteristic of the virus scan request" as claimed by appellant (emphasis added).

Appellant respectfully asserts that at least the third element of the *prima facie* case of obviousness has not been met, for the reasons set forth hereinabove.

      Group # 4: Claims 43 and 44

The Examiner has relied on Col. 3, lines 48-64 of Chess to make a prior art showing of appellant's claimed technique "wherein the priority order is further based on comparing the characteristics of the virus scan request with the characteristics of the virus scan requests previously placed on the queue." Appellant respectfully asserts that such excerpt relied on by the Examiner simply discloses that files are clustered according to a code-similarity measure evaluated on a probably-malicious part of each file. Therefore, files that are presently in the queue are prioritized according to their code, and thus there is no teaching of "comparing the characteristics of the virus scan request with the characteristics of the virus scan requests previously placed on the queue," as claimed by appellant.

In the Office Action dated 8/5/2005, the Examiner has simply reiterated his argument that "Chess teaches clustering and updating which correspond to the already on the queue and previously on the queue." Appellant respectfully asserts that nowhere in Chess is there any disclosure of "comparing the characteristics of the virus scan request with the characteristics of the virus scan requests previously placed on the queue," as claimed by appellant (emphasis added). Simply clustering files that were already placed on the queue and updating prioritizing information, as

-20-

in taught by Chess, does not even suggest utilizing any sort of <u>characteristics of a virus scan request</u>, and especially not with respect to any sort of comparison, in the specific context claimed by appellant.

Appellant respectfully asserts that at least the third element of the *prima facie* case of obviousness has not been met, for the reasons set forth hereinabove.

Group # 5: Claims 46 and 47

The Examiner has relied on Col. 4, lines 9-13 of Chess to make a prior art showing of appellant's claimed "wherein the selection is further based on comparing the characteristics of the virus scan requests placed in the queue with the characteristics of the previously selected virus scan requests whose objects are currently being scanned." Such excerpt, however, only discloses updating prioritization information based on identifying other queued files as being in the same cluster as a file that has been determined to be malicious. There is simply no disclosure of "objects currently being scanned," in the context claimed by appellant.

In the Office Action dated 8/5/2005, the Examiner has again simply reiterated his argument that "Chess teaches clustering and updating which correspond to the already on the queue and previously on the queue." Appellant again respectfully asserts that simply clustering files that were already placed on the queue and updating prioritizing information, as taught by Chess, does not even suggest utilizing any sort of <u>characteristics of a virus scan request</u>, and especially not "<u>comparing</u> the characteristics of the virus scan requests placed in the queue with the characteristics of the previously selected virus scan requests <u>whose objects are currently being scanned</u>," as claimed by appellant (emphasis added).

Appellant respectfully asserts that at least the third element of the *prima facie* case of obviousness has not been met, for the reasons set forth hereinabove.

Issue # 4:

-21-

The Examiner has rejected Claim 54 under 35 U.S.C. 103(a) as being unpatentable over Chess et al., U.S. Patent No. 6,560,632 in view of Wong, U.S. Patent No. 5,974,465, in further view of "Reserved-Checkout for Versioned Object" IBM 1993, in further view of McAfee (webpage).

Group # 1: Claim 54

Such claim is deemed allowable for the reasons base Claim 37 is deemed allowable.

Issue # 5:

The Examiner has rejected Claims 55-59 under 35 U.S.C. 103(a) as being unpatentable over Chess et al., U.S. Patent No. 6,560,632 in view of Wong, U.S. Patent No. 5,974,465, in further view of "Reserved-Checkout for Versioned Object" IBM 1993, in further view of "Chapter Thirteen Performance Tuning" (webpage), in further view of Using Netware 3.12 (webpage).

Group # 1: Claims 55, 56, and 59

Such claim is deemed allowable for the reasons Claim 1 is deemed allowable.

In addition, the Examiner has relied on the following excerpts from Performance and NetWare to meet appellant's claimed "the characteristic including .... a type of the process accessing the object... and an indication of a network node accessing the object, wherein the virus scan request is prioritized based on .... the process type being an operating system as compared to a user appellant and ..... the indication being that the object is accessed from a server console as compared to a network client" (see Claim 55 and similar, but not identical, language in remaining independent claims).

-22-

Application Priority

- 0-15: User-accessible process priorities
    - 0-6: Low user range
    - 4: Low value
    - 7: Normal
    - 13: High value
    - 8-15: High user range
- 16-31: System-accessible process priorities
    - 16-24: Real-time values accessible to Administrator-level accounts
    - 24: Real-time value
    - 25-31: Real-time value accessible to operating system only

(see page 4 of Performance)

SEND

SEND is used almost exactly like BROADCAST. The only difference is that messages sent with SEND are treated as regular-priority messages, similar to those you receive from another user's workstation, whereas messages sent with BROADCAST are treated as high-priority alerts from the server console. Users can prevent receipt of messages sent with SEND by using the CASTOFF command, but BROADCAST requires the CASTOFF ALL command.

(see page 7 of Netware)

The Examiner has also argued that "Performance teaches prioritization based on process types (see page 4) and Netware teaches prioritization based on network node type (see page 8)." Appellant respectfully disagrees with such assertion, as it appears that the Examiner has simply failed to consider the full weight of appellant's claims.

Specifically, the Performance excerpt above simply fails to meet appellant's claimed "characteristic including .... a type of the process accessing the object... wherein the virus scan request is prioritized based on .... the process type being an operating system as compared to a user application" (emphasis added). As clearly set forth in the relevant excerpts hereinabove, Performance suggests processes that are accessible by user and system applications, and fall short of a process that specifically accesses the object, as claimed, where one of the process types is an operation system process (note that a system application does not meet an operating system).

-23-

Further, the Netware excerpt above fails to meet appellant's claimed "characteristic including ....an indication of a network node accessing the object, wherein the virus scan request is prioritized based on ... the indication being that the object is accessed from a server console as compared to a network client." Again, similar to the Performance reference, Netware does not meet appellant's claimed node that accesses the object, as claimed. Instead Network merely suggests two types of messages, one sent using a SEND feature, and one sent using a BROADCAST feature.

In the Advisory Action dated 4/19/05, the Examiner has stated that page 4 of Performance at 25-31 in the last part of the list teaches operating system processes. However, appellant respectfully asserts that the above excerpt does not teach "a type of process accessing the object" where the object is the item that is requested to be scanned (see Claim 55).

Also in the Advisory Action dated 4/19/05, the Examiner has stated that "the SEND feature teaches the server console and the BROADCAST feature teaches a network client which make the requests." Appellant respectfully asserts that SEND, as in Netware, does not teach an indication of a network node accessing an object, as claimed, since it only relates to messages sent between workstations. In addition, BROADCAST, as in Netware, is simply a message sent by Netware to all users. Again, there is no accessing of an object, as claimed by appellant. In addition, even if receiving the message did indicate accessing an object, Netware would still not meet appellant's specific claim language since, in both the SEND and BROADCAST instances, a workstation (user) is receiving the message, and appellant claims the object being "accessed from a server console as compared to a network client."

In the Office Action dated 8/5/2005, the Examiner has stated that "Performance and Netware are only relied upon for their teachings of basing priority on characteristics...[and that] [w]hen applied to the prioritization system of the modified Chess we obtain the processes/nodes accessing the objects." Appellant

-24-

respectfully asserts that Chess only teaches prioritizing representative files based on
characteristics of the files (see Col. 7, lines 41-49) and not characteristics of the
virus scan request. Furthermore, the Performance and Netware references still fail
to meet appellant's claimed "the characteristic including .... a type of the process
accessing the object... and an indication of a network node accessing the object,
wherein the virus scan request is prioritized based on .... the process type being an
operating system as compared to a user appellant and ..... the indication being that
the object is accessed from a server console as compared to a network client," as
argued above. Therefore, for the reasons argued above, the combination of the
Chess, Performance, and Netware references do not make a prior art showing of
appellant's specific claim language.

Appellant respectfully asserts that at least the third element of the *prima facie* case
of obviousness has not been met, for the reasons set forth hereinabove.

Group # 2: Claim 57

The Examiner has relied on Col. 3, line 47-Col. 4, line 5 of Chess to make a prior art
showing of appellant's claimed "wherein selecting is based on the priority order."
Appellant respectfully asserts that the only "selecting" taught by the above excerpt
simply relates to selecting "N smallest files in each cluster as the one or more
representatives..." Further, the only priority taught by Chess relates to prioritizing
the representatives (see Col. 3, lines 52-53). Therefore, the actual selecting of files
to be representatives cannot be prioritized since the prioritizing only happens once
the representatives are selected (see Col. 4, line 1).

In the Office Action dated 8/5/2005, the Examiner has simply reiterated his
argument that "Chess teaches clustering and updating which correspond to the
already on the queue and previously on the queue." Appellant respectfully asserts
that nowhere in Chess is there any disclosure of "comparing the characteristics of
the virus scan request with the characteristics of the virus scan requests previously
placed on the queue," as claimed by appellant (emphasis added). Simply clustering
files that were already placed on the queue and updating prioritizing information, as

-25-

in taught by Chess, does not even suggest utilizing any sort of <u>characteristics of a virus scan request</u>, and especially not in the specific context claimed by appellant.

Appellant respectfully asserts that at least the third element of the *prima facie* case of obviousness has not been met, for the reasons set forth hereinabove.

Group # 3: Claim 58

The Examiner has relied on Col. 3, line 47-Col. 4, line 5 of Chess to make a prior art showing of appellant's claimed "wherein selecting is based on the characteristic of the virus scan request." Such excerpt however, merely teaches that "selecting N smallest files in each cluster as the one or more representatives..." There is simply no disclosure of any basis from which such files are selected, and therefore no disclosure of such basis being the "characteristic of the virus scan request," in the manner claimed by appellant.

In the Office Action dated 8/5/2005, the Examiner has simply reiterated his argument that "Chess teaches clustering and updating which correspond to the already on the queue and previously on the queue." Appellant respectfully asserts that nowhere in Chess is there any disclosure of "comparing the characteristics of the <u>virus scan request</u> with the characteristics of the virus scan requests previously placed on the queue," as claimed by appellant (emphasis added). Simply clustering files that were already placed on the queue and updating prioritizing information, as in taught by Chess, does not even suggest utilizing any sort of <u>characteristics of a virus scan request</u>, and especially not in the specific context claimed by appellant.

Appellant respectfully asserts that at least the third element of the *prima facie* case of obviousness has not been met, for the reasons set forth hereinabove.

In view of the remarks set forth hereinabove, all of the independent claims are deemed allowable, along with any claims depending therefrom.

VIII APPENDIX OF CLAIMS (37 C.F.R. § 41.37(c)(1)(viii))

The text of the claims involved in the appeal (along with associated status information) is set forth below:

1. (Previously Presented) A method for prioritizing virus scan requests comprising:

    checking a virus scan request to determine if scanning an object of the request is necessary; and

    placing the virus scan request on a queue in a priority order based on a characteristic of the virus scan request, the characteristic including at least one of an identity of the user triggering the virus scan request, a type of the process accessing the object, a time stamp of when the virus request was received, and an indication of a network node accessing the object, wherein the virus scan request is prioritized based on at least one of the user identity being an administrator as compared to a regular user, the process type being an operating system as compared to a user appellant, the time stamp being earlier than the time stamps of each scan request previously placed on the queue, and the indication being that the object is accessed from a server console as compared to a network client.

2. (Original) The method of claim 1, further comprising:

    selecting a one of the virus scan requests from the queue.

3. (Original) The method of claim 2, wherein selecting is based on the priority order.

4. (Original) The method of claim 2, wherein selecting is based on the characteristic of the virus scan request.

5. (Original) The method of claim 2, further comprising:

    scanning the object of the selected virus scan request.

6. (Cancelled)

-27-

7. (Original) The method of claim 1, wherein the priority order is further based on comparing the characteristic of the virus scan request with the characteristics of the virus scan requests previously placed on the queue.

8. (Original) The method of claim 7, wherein the priority order is further based on a parameter indicating which of the compared characteristics is given higher priority.

9. (Original) The method of claim 4, wherein selecting is further based on comparing the characteristics of the virus scan requests placed in the queue.

10. (Original) The method of claim 9, wherein selecting is further based on comparing the characteristics of the virus scan requests placed in the queue with the characteristics of the previously selected virus scan requests whose objects are currently being scanned.

11. (Original) The method of claim 10, wherein selecting is further based on a parameter indicating which of the compared characteristics is given higher priority.

12. (Cancelled)

13. (Cancelled)

14. (Cancelled)

15. (Cancelled)

16. (Cancelled)

17. (Original) The method of claim 1, wherein scanning is necessary when a virus scan status indicates the object is not known to be virus free.

-28-

18. (Original) The method of claim 1, wherein scanning is necessary when the object of the virus scan request is in a directory not excluded from virus scanning.

19. (Previously Presented) An apparatus comprising:

a machine-accessible medium having stored thereon executable instructions to cause a computer to perform

checking a virus scan request to determine if scanning is necessary; and

placing the virus scan request on a queue in a priority order based on a characteristic of the virus scan request, the characteristic including at least one of an identity of the user triggering the virus scan request, a type of the process accessing the object, a time stamp of when the virus scan request was received, and an indication of a network node accessing the object, wherein the virus scan request is prioritized based on at least one of the user identity being an administrator as compared to a regular user, the process type being an operating system as compared to a user application, the time stamp being earlier than the time stamps of each scan request previously placed on the queue, and the indication being that the object is accessed from a server console as compared to a network client.

20. (Original) The apparatus of claim 19, further comprising instructions for selecting a one of the virus scan requests from the queue.

21. (Original) The apparatus of claim 20, wherein the instructions for selecting is based on the priority order.

22. (Original) The apparatus of claim 20, wherein the instructions for selecting is based on the characteristic of the virus scan request.

23. (Original) The apparatus of claim 20, further comprising instructions for scanning the object of the selected virus scan request.

-29-

24. (Cancelled)

25. (Original) The apparatus of claim 20, wherein the instructions for placing the virus scan request on the queue in the priority order are further based on comparing the characteristic of the virus scan request with the characteristics of the virus scan requests previously placed on the queue.

26. (Original) The apparatus of claim 25, wherein the instructions for placing the virus scan request on the queue in the priority order are further based on a parameter indicating which of the compared characteristics is given higher priority.

27. (Original) The apparatus of claim 20, wherein the instructions for selecting are further based on comparing the characteristics of the virus scan requests placed in the queue.

28. (Original) The apparatus of claim 27, wherein the instructions for selecting are further based on comparing the characteristics of the virus scan requests placed in the queue with the characteristics of the previously selected virus scan requests whose objects are currently being scanned.

29. (Original) The apparatus of claim 27, wherein the instructions for selecting are further based on a parameter indicating which of the compared characteristics is given higher priority.

30. (Cancelled)

31. (Cancelled)

32. Cancelled)

33. (Cancelled)

-30-

34. (Cancelled)

35. (Original) The apparatus of claim 19, wherein the instructions for checking to determine if scanning is necessary include determining when a virus scan status indicates the object is not known to be virus free.

36. (Original) The apparatus of claim 19, wherein the instructions for checking to determine if scanning is necessary include determining when the object of the virus scan request is in a directory not excluded from virus scanning.

37. (Previously Presented) A virus scanner comprising:

a pre-processor thread that checks a virus scan request to determine if scanning an object of the request is necessary;

a queue that receives the virus scan request in a priority order based on characteristics of the virus scan request, the characteristics including at least two of an identity of the user triggering the virus scan request, a type of the process accessing the object, a time stamp of when the virus scan request was received, and an indication of a network node accessing the object, wherein the virus scan request is prioritized based on at least two of the user identity being an administrator as compared to a regular user, the process type of being an operating system as compared to a user application, the time stamp being earlier than the time stamps of each scan request previously placed on the queue, and the indication being that the object is accessed from a server console as compared to a network client.

38. (Original) The virus scanner of claim 37, further comprising:

a scanner thread that selects a one of the virus scan requests from the queue.

39. (Original) The virus scanner of claim 38, wherein the selection is based on the priority order.

-31-

40. (Original) The virus scanner of claim 38, wherein the selection is based on the characteristic of the virus scan request.

41. (Original) The virus scanner of claim 38, wherein the scanner thread further scans the object of the selected virus scan request.

42. (Cancelled)

43. (Original) The virus scanner of claim 37, wherein the priority order is further based on comparing the characteristic of the virus scan request with the characteristics of the virus scan requests previously placed on the queue.

44. (Original) The virus scanner of claim 43, wherein the priority order is further based on a parameter indicating which of the compared characteristics is given higher priority.

45. (Original) The virus scanner of claim 40, wherein the selection is further based on comparing the characteristics of the virus scan requests placed in the queue.

46. (Original) The virus scanner of claim 45, wherein the selection is further based on comparing the characteristics of the virus scan requests placed in the queue with the characteristics of the previously selected virus scan requests whose objects are currently being scanned.

47. (Original) The virus scanner of claim 46, wherein the selection is further based on a parameter indicating which of the compared characteristics is given higher priority.

48. (Cancelled)

49. (Cancelled)

50. (Cancelled)

-32-

51. (Cancelled)

52. (Cancelled)

53. (Original) The virus scanner of claim 37, wherein determining that scanning is necessary includes determining when a virus scan status indicates the object is not known to be virus free.

54. (Original) The virus scanner of claim 37, wherein determining that scanning is necessary includes determining when the object of the virus scan request is in a directory not excluded from virus scanning.

55. (Previously Presented) A computer system comprising:
    a processor coupled to a system bus;
    a memory coupled to the processor through the system bus;
    a machine-accessible medium coupled to the processor through the system bus;
    a virus scanning process executed from the machine-accessible medium by the processor, wherein the virus scanning process causes the processor to check a virus scanning request to determine if scanning an object of the request is necessary, and if so to further place the checked virus scan request on a queue in a priority order based on characteristics of the virus scan request, the characteristics including each of an identity of the user triggering the virus scan request, a type of the process accessing the object, a time stamp of when the virus scan request was received, and an indication of a network node accessing the object, wherein the virus scan request is prioritized based on the user identity being an administrator as compared to a regular user, the process type being an operating system as compared to a user application, the time stamp being earlier than the time stamps of each scan request previously placed on the queue, and the indication being that the object is accessed from a server console as compared to a network client.

-33-

56. (Original) The computer system of claim 55, wherein the virus scanning process further causes the processor to select a one of the virus scan requests from the queue.

57. (Original) The computer system of claim 56, wherein the selection is based on the priority order.

58. (Original) The computer system of claim 56, wherein the selection is based on the characteristic of the virus scan request.

59. (Original) The computer system of claim 56, wherein the virus scanning process further causes the processor to scan the object of the selected virus scan request.

60. (Cancelled)

-34-

IX APPENDIX LISTING ANY EVIDENCE RELIED ON BY THE APPELLANT IN THE APPEAL (37 C.F.R. § 41.37(c)(1)(ix))

There is no such evidence.

In the event a telephone conversation would expedite the prosecution of this application, the Examiner may reach the undersigned at (408) 971-2573. For payment of any additional fees due in connection with the filing of this paper, the Commissioner is authorized to charge such fees to Deposit Account No. 50-1351 (Order No. NAI1P360_00.0148.01).

Respectfully submitted,

By: _____   Date: ___10/17/05___

Kevin J. Zilka
Reg. No. 41,429

Zilka-Kotab, P.C.
P.O. Box 721120
San Jose, California 95172-1120
Telephone: (408) 971-2573
Facsimile: (408) 971-4660

-36-